

MULTIMEDIA



UNIVERSITY

STUDENT ID NO

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# MULTIMEDIA UNIVERSITY

## FINAL EXAMINATION

TRIMESTER 3, 2015/2016

**DBM5028 – BUSINESS FINANCE**  
( All sections / Groups )

1 JUNE 2016  
2.30 p.m. – 4.30 p.m.  
( 2 Hours )

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### INSTRUCTIONS TO STUDENT

1. This question paper consists of 11 pages with 2 sections.
2. Answer all questions.
3. For Section A, shade your answers on the OMR sheet provided.
4. For Section B, write your answers in the answer booklet provided.
5. The formula tables are given in the appendix.

**SECTION A: MULTIPLE CHOICE QUESTIONS (40 marks)**

*Instruction: Please shade your answers on the OMR sheet provided.*

1. Zhi Yin works as a finance executive in a multinational corporation in Kuala Lumpur after graduating a year ago. Last month, she was transferred to their Singapore office to be promoted as the finance manager. Her job falls into which one of the following areas of finance?
  - A. Corporate finance.
  - B. Finance institutions.
  - C. International finance.
  - D. Investments.
  
2. Which one of the following is **NOT** a working capital decision?
  - A. Determining the best type of debt to finance the company's inventory.
  - B. Determining the optimal inventory level.
  - C. Determining the terms of sale for the company's credit sales.
  - D. Determining when suppliers should be paid.
  
3. Which one of the following forms of business organisation offers liability protection to some of its owners but not to all of its owners?
  - A. Corporation.
  - B. General partnership.
  - C. Limited partnership.
  - D. Sole proprietorship.
  
4. What is the goal of financial management for a sole proprietorship?
  - A. Maximise the market value of the company's current stock.
  - B. Maximise the market value of the owner's equity.
  - C. Maximise the net income given the current resources of the company.
  - D. Minimise the reliance on the company's fixed costs.
  
5. Which one of the following decreases net income but does not affect the operating cash flow of a firm which owes no taxes for the current year?
  - A. Direct cost.
  - B. Indirect cost.
  - C. Noncash item.
  - D. Variable cost.

**Continued.....**

6. Which one of the following is included in net working capital?
- A. Invoice to a customer with credit term of 120 days.
  - B. Loan obtained from a bank payable over the next 10 years.
  - C. Newly purchased office cabinets with a useful life of 5 years.
  - D. Twelve-years bonds issued to the public.
7. Which one of the following statements concerning market and book values is correct?
- A. Book values represent the amount of cash that will be received if an asset is sold.
  - B. The current book value of equipment purchased last year is equal to the initial cost of the equipment.
  - C. The market value of fixed assets will always exceed the book value of those assets.
  - D. The market value tends to provide a better guide to the actual worth of an asset than does the book value.
8. During the past year, Syarikat Xylon paid RM20,000 in interest along with RM31,000 in dividends. The company issued RM180,000 of stocks and borrowed RM150,000 of new debt. The company also reduced the balance due on the old debt by RM210,000. What is the amount of the cash flow to creditors?
- A. RM50,000
  - B. RM80,000
  - C. RM91,000
  - D. RM108,000
9. Vivian just received RM500 for her birthday gift today. Which one of the following will increase the future value of that amount?
- A. Lengthening the investment time period.
  - B. Paying interest only at the end of the investment period rather than throughout the investment period.
  - C. Paying simple interest rather than compound interest.
  - D. Reducing the interest rate.
10. Given an interest rate of zero percent, the future value of a lump sum invested today will always \_\_\_\_\_.
- A. be infinite in value
  - B. decrease if the investment time period is shortened
  - C. increase if the investment time period is lengthened
  - D. remain constant, regardless of the investment time period

11. U-Machinery Sdn. Bhd. needs to borrow RM300,000 for 5 years. The loan will be repaid in one lump sum at the end of the loan term. Which one of the following interest rates is best for the firm?
- A. 7.5 percent interest, compounded annually.
  - B. 7.5 percent interest, compounded semi-annually.
  - C. 7.5 percent interest, compounded quarterly.
  - D. 7.5 percent simple interest.
12. Terry has RM1,800 today and wants to double his money in 6 years. What interest must he earn if the interest is compounded annually?
- A. 8.91 percent.
  - B. 10.91 percent.
  - C. 11.22 percent.
  - D. 12.25 percent.
13. Ray Vision Enterprise is buying a new equipment and will finance it with a loan which requires monthly payments of RM555 for the next 3 years. These payments can be described by which one of the following terms?
- A. Annuity.
  - B. Consol.
  - C. Factor.
  - D. Perpetuity.
14. Which one of the following features distinguishes an ordinary annuity from an annuity due?
- A. Annuity interest rate.
  - B. Amount of each payment.
  - C. Number of equal payments.
  - D. Timing of the annuity payments.
15. Qasandra is taking out a loan today. The cash amount that she will receive today is equal to the present value of the lump sum payment which she will be required to pay 3 years from today. Which type of loan is this?
- A. Amortised.
  - B. Interest-only.
  - C. Principal-only.
  - D. Pure discount.

16. Which one of the following has the lowest effective annual rate?
- A. 12 percent compounded annually.
  - B. 12 percent compounded semi-annually.
  - C. 12 percent compounded quarterly.
  - D. 12 percent compounded monthly.
17. Which one of the following is an example of a perpetuity?
- A. Insurance compensation of RM1,000 a month for life.
  - B. Payment of RM1,500 a year from trust fund forever.
  - C. Rent payment of RM880 a month for one year.
  - D. Retirement pay of RM2,000 a month for 20 years.
18. \_\_\_\_\_ refers to a bond's rate of return that is required by the market place.
- A. Call yield
  - B. Coupon rate
  - C. Discount rate
  - D. Yield to maturity
19. When a bond's yield to maturity is greater than the bond's coupon rate, the bond \_\_\_\_\_.
- A. has reached its maturity date
  - B. is selling at par
  - C. is selling at a discount
  - D. is selling at a premium
20. Yesterday Nasaruddin found a bond certificate on the sofa of a café. He picked it up and noticed that the bond matured today. He presented the bond to the bank teller and received both the principal and interest payment. The bond that Nasaruddin found must have been which one of the following?
- A. Bearer form bond.
  - B. Registered form bond.
  - C. Debenture.
  - D. Note.

21. Mahligai Indah has a bond issue outstanding. The issue's indenture provision prohibits the firm from redeeming the bonds during the first three years. This provision is referred to as the \_\_\_\_\_ provision.
- A. liquidity
  - B. deferred call
  - C. market
  - D. sinking fund
22. \_\_\_\_\_ is the rate of return an investor earns on a bond before adjusting for inflation.
- A. Coupon rate
  - B. Dirty rate
  - C. Nominal rate
  - D. Real rate
23. The capital gains yield equals which one of the following?
- A. Current discount rate.
  - B. Dividend growth rate.
  - C. Dividend yield.
  - D. Market rate of return.
24. Which one of the following will increase the current value of a stock?
- A. Decrease in the dividend growth rate.
  - B. Decrease in the expected dividend for next year.
  - C. Increase in the capital gains yield.
  - D. Increase in the required return.
25. On which one of the following dates do dividends become a liability of the issuer for accounting purpose?
- A. First day of the fiscal year in which the dividend is expected to be paid.
  - B. On the declaration date.
  - C. On the date of payment.
  - D. On the date of record.
26. \_\_\_\_\_ market allows shareholders to resell their shares to other investors.
- A. Initial
  - B. Primary
  - C. Proxy
  - D. Secondary

27. There are two open seats on the board of directors. If two separate votes occur to elect the new directors, the firm is using a type of voting that is best described as \_\_\_\_\_ voting.
- A. cumulative
  - B. sequential
  - C. straight
  - D. proxy
28. The net present value \_\_\_\_\_.
- A. ignores the time value of money
  - B. decreases as the required rate of return decreases
  - C. is inversely related to the discount rate
  - D. is unaffected by the timing of an investment's cash flows
29. Which one of the following statements is correct?
- A. A shorter payback period is preferred over a longer payback period.
  - B. The payback period considers the timing and amount of all of a project's cash flows.
  - C. The payback rule is biased in favour of long-term projects.
  - D. The payback rule states that you should accept a project if the payback period is less than one year.
30. \_\_\_\_\_ can be defined as a benefit-cost ratio.
- A. Average accounting return
  - B. Net present value
  - C. Payback period
  - D. Profitability index
31. The average accounting return \_\_\_\_\_.
- A. discounts all values to today's ringgit
  - B. measures profitability rather than cash flow
  - C. is expressed as a percentage of an investment's current market value
  - D. will equal the required return when the net present value equals zero
32. Which one of the following is an indicator that an investment is acceptable?
- A. Average accounting return that exceeds the company's target.
  - B. Payback period that exceeds the required period.
  - C. Negative net present value.
  - D. Profitability index of zero.

33. Which one of the following commences on the day inventory is purchased and ends on the day the payment for that inventory is collected? Assume all sales and purchases are on credit.
- A. Accounts receivable period.
  - B. Inventory period.
  - C. Cash cycle.
  - D. Operating cycle.
34. All else held constant, which one of the following statements is correct concerning the accounts payable period?
- A. A decrease in the accounts payable period will decrease the operating cycle.
  - B. An increase in the accounts payable period will decrease the cash cycle.
  - C. An increase in the accounts payable turnover rate decreases the cash cycle.
  - D. The accounts payable period is equal to sales divided by average accounts payable.
35. \_\_\_\_\_ is directly related to increases in a firm's current assets.
- A. Carrying costs
  - B. Out-of-stock costs
  - C. Re-order costs
  - D. Shortage costs
36. Gigih Metal is concentrating on increasing its inventory turnover rate from 5.5 times to 7.0 times. Currently, the company has a 133 day operating cycle. What will the company's new operating cycle be if it can effectively make this change?
- A. 118.78 days.
  - B. 131.50 days.
  - C. 134.50 days.
  - D. 147.22 days.
37. Far East Sdn. Bhd. generally holds RM200,000 in cash in case an unexpected investment opportunity arises. Which one of the following refers to holding cash for this type of purpose?
- A. Opportunistic motive.
  - B. Precautionary motive.
  - C. Speculative motive.
  - D. Transaction motive.



38. EkoMart received ten cheques today and went to the bank to deposit all of them. Unfortunately, the bank was closed for the day due to a robbery. How does the bank closure affect the firm's float assuming these ten cheques are the only outstanding bank items?
- A. Collection float decreased.
  - B. Collection float increased.
  - C. Disbursement float decreased.
  - D. Disbursement float increased.
39. Which one of the following best defines the economic order quantity (EOQ)?
- A. Number of items that are sold on average each month.
  - B. Restocking quantity that minimises the total cost of inventory.
  - C. Minimum amount that must be ordered to obtain discount.
  - D. Minimum size of an order needed to qualify for free shipping.
40. Delima Enterprise sells 2,800 units of its goods each year at a price of RM200 per unit. All sales are on credit terms of 2/15, net 45. The discount is taken by 55 percent of the customers. What is the amount of the company's accounts receivable?
- A. RM37,972.60
  - B. RM38,972.60
  - C. RM43,726.09
  - D. RM43,826.09

**SECTION B: STRUCTURED QUESTIONS (60 marks)**

*Instruction: Please write all your answers in the answer booklet provided.*

**QUESTION 1**

- (a) When you were born, your favourite uncle put some money in an account as a gift for you. You are 16 years old now and are allowed to withdraw the money for the first time. Upon checking, the account has a balance of RM7,078.30 in it and pays 4.5 percent interest rate.
- (i) How much money did your uncle originally put in the account? (3 marks)
  - (ii) If you decided to leave the money in the account until your 21<sup>st</sup> birthday, how much money would be in the account? (3 marks)
  - (iii) What if you left the money until your 38<sup>th</sup> birthday? (2.5 marks)
- (b) Syuen Manufacturing just borrowed RM200,000 from the bank to finance its new machinery purchase. The bank charges an interest rate of 6 percent.
- (i) How much will the monthly loan payment be if the loan is for 5 years? (3.5 marks)
  - (ii) If Syuen Manufacturing can only allocate RM4,000 per month towards paying the monthly instalment, can the company afford to buy the machinery? (0.5 mark)
  - (iii) What is the effective annual rate on this loan? (2.5 marks)

**[TOTAL 15 MARKS]**

**QUESTION 2**

- (a) Fiore Corporation is currently issuing 10-year, 7 percent coupon bonds that pay semi-annual coupons. The market yield on similar bonds is 8 percent.
- (i) What is the bond price? (5 marks)
  - (ii) What is the current yield for investors? (2.5 marks)

- (b) Lyralei Corporation needs to raise RM3 million to build a new factory next to their existing plant. The firm wants to raise this money by selling zero coupon bonds that have 8 years to maturity. The yield to maturity on these bonds is 5.5 percent.
- (i) Assume quarterly compounding, what price should Lyralei Corporation charge for these bonds if the face value is RM1,000? (3 marks)
  - (ii) How many bonds must the company sell to raise RM3 million? (2 marks)
  - (iii) If the price of this bond becomes RM680 next year, what is the percentage of price increase? (2.5 marks)

[TOTAL 15 MARKS]

### QUESTION 3

- (a) RS Automotive just paid its annual dividend of RM1.50 per share. At the same time, the firm announced that all future dividends will be increased by 2.5 percent annually. The required return on this stock is 11 percent.
- (i) What is RS Automotive's stock worth today? (3.5 marks)
  - (ii) What is the firm's stock worth seven years from now? (4 marks)
  - (iii) If the maximum you are willing to pay to buy the stock is RM15 per share, would you buy RS Automotive's stocks today? (1 mark)
- (b) KC Corporation has been showing a healthy growth. As a result, the firm promises to increase their dividends by 5 percent annually. Currently, the stock sells for RM42 per share at a required return of 12 percent. What was the amount of the last dividend this firm paid? (3.5 marks)
- (c) The common stock of Fishy Taste is valued at RM9.90 per share. The company pledges to increase its dividends by 4.5 percent annually and expects its next dividend to be RM0.60 per share. What is the total rate of return on this stock? (3 marks)

[TOTAL 15 MARKS]

**QUESTION 4**

- (a) Minton Engineering is considering the following two mutually exclusive projects. The required return on each project is 13 percent.

Year	Project Reach	Project Grow
0	-RM120,000	-RM120,000
1	25,000	50,000
2	80,000	45,000
3	37,000	44,000
4	22,000	25,000

- (i) Calculate the payback period for both projects. (5 marks)
- (ii) Which project would you recommend? (1 mark)
- (b) A project has the following cash inflows shown in the table below. Determine the initial cost of the project if the profitability index is 1.90 and the discount rate is 10.5 percent.

Year	1	2	3	4
Inflow (RM)	7,500	9,900	11,300	12,800

(5 marks)

- (c) The finance manager of Syarikat Damai has analysed two potential investments in line with the company's plan to expand their business. Below is the result of the manager's analysis which was based on net present value and payback period methods.

	Project Blend	Project Engage
Net present value	RM112,450	RM155,710
Payback period	3.55 years	4.12 years

- (i) Based on net present value, which project should be recommended? (1 mark)
- (ii) Based on payback period, which project should be recommended? (1 mark)
- (iii) If the projects are mutually exclusive, which project(s) should be recommended? (1 mark)
- (iv) If the projects are independent, which project(s) should be recommended? (1 mark)

**[TOTAL 15 MARKS]****End of Page.**

## Appendix

### I. The cash flow identity

Cash flow from assets = Cash flow to creditors (bondholders)  
+ Cash flow to stockholders (owners)

### II. Cash flow from assets

Cash flow from assets = Operating cash flow  
– Net capital spending  
– Change in net working capital (NWC)

where

Operating cash flow = Earnings before interest and taxes (EBIT)  
+ Depreciation – Taxes

Net capital spending = Ending net fixed assets – Beginning net fixed assets  
+ Depreciation

Change in NWC = Ending NWC – Beginning NWC

### III. Cash flow to creditors (bondholders)

Cash flow to creditors = Interest paid – Net new borrowing

### IV. Cash flow to stockholders (owners)

Cash flow to stockholders = Dividends paid – Net new equity raised

### I. Symbols

PV = Present value, what future cash flows are worth today

FV<sub>t</sub> = Future value, what cash flows are worth in the future

$r$  = Interest rate, rate of return, or discount rate per period typically , but not always, one year

$t$  = Number of periods typically , but not always, the number of years

$C$  = Cash amount

### II. Future value of $C$ invested at $r$ percent per period for $t$ periods

$FV_t = C \times (1 + r)^t$

The term  $(1 + r)^t$  is called the *future value factor*.

### III. Present value of $C$ to be received in $t$ periods at $r$ percent per period

$PV = C/(1 + r)^t$

The term  $1/(1 + r)^t$  is called the *present value factor*.

### IV. The basic present value equation giving the relationship between present and future value is

$PV = FV_t/(1 + r)^t$

### I. Symbols

PV = Present value, what future cash flows are worth today

FV<sub>t</sub> = Future value, what cash flows are worth in the future at time  $t$

$r$  = Interest rate, rate of return, or discount rate per period typically , but not always, one year

$t$  = Number of periods typically , but not always, the number of years

$C$  = Cash amount

### II. Future value of $C$ invested per period for $t$ periods at $r$ percent per period

$FV_t = C \times [(1 + r)^t - 1]/r$

A series of identical cash flows is called an annuity, and the term  $[(1 + r)^t - 1]/r$  is called the *annuity future value factor*.

### III. Present value of $C$ per period for $t$ periods at $r$ percent per period

$PV = C \times \{1 - [1/(1 + r)^t]\}/r$

The term  $\{1 - [1/(1 + r)^t]\}/r$  is called the *annuity present value factor*.

### IV. Present value of a perpetuity of $C$ per period

$PV = C/r$

A perpetuity has the same cash flow every year forever.